

REMARKS/ARGUMENTS

The rejections presented in the Office action dated August 5, 2005, have been considered. Claims 1-33 remain pending in the application. The allowance of Claims 20-33 and the conditional allowability of Claims 4, 5-12, and 15 is acknowledged, and the Applicant thanks the Examiner for favorable consideration of these claims. Reconsideration of the pending claims and allowance of the application in view of the present amendment and response is respectfully requested.

Claim 16 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Applicant respectfully traverses the rejection, but to facilitate prosecution of the application has amended Claim 16 to replace the term “standard congestion response procedure” with “Transmission Control Protocol (TCP) congestion response procedure.” Therefore the Applicant respectfully requests withdrawal of the rejection.

Claims 1, 2, and 17 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,711,128 to *Ramakrishnan* (hereinafter “*Ramakrishnan*”). The Applicant respectfully traverses in view of the amendments and remarks provided herein.

The Applicant respectfully submits that the claims as originally filed are not anticipated by *Ramakrishnan*. However, in order to facilitate prosecution of the application, the Applicants present this response with amendment to clarify particular aspects of the claimed invention. In particular, Claim 1 has been amended to set forth that verification of non-congestion-based packet loss at the sending module occurs independently of the receipt of loss notification signals. Applicant submits that this is fully supported by the Specification as originally filed. For example, the paragraph beginning at page 10, line 24 and ending on page 11, line 6 provides one example of verification that occurs independently of the advisory loss notification signal.

In contrast, *Ramakrishnan* describes retransmission of packets without invoking congestion compensation mechanisms through the use of selective acknowledgements (SACKs) sent between TCP endpoints (e.g., column 1, lines 59-67). The SACKs contain

a bitmap indicating which packets were received in error. The Examiner has characterized the first such SACK received as a loss notification signal from the network node to the sending module in response to identification of the non-congestion-based packet loss. While not acquiescing to this characterization of the claims or the reference, Applicants submit that *Ramakrishnan* does not teach, expressly or inherently, verifying non-congestion based packet loss independently of the SACKs.

As *Ramakrishnan* describes in column 5, lines 44-51, the indication of non-congestion bit errors is based on the receipt of subsequent, non-duplicate SACKs following the receipt of a SACK that indicates a dropped packet. However, if three successive duplicate SACKS are received, then a congestion processing routine is invoked (e.g., col. 6, lines 58-63). However, the Applicant notes that these indications of congestion or non-congestion processing are not *independent* of the SACK signaling, but *dependent* on the SACK signaling. For this reason, *Ramakrishnan* does not expressly or inherently disclose verifying non-congestion based packet loss independently of loss notification signals.

In contrast with *Ramakrishnan*, Applicant's Claim 1 sets forth sending a loss notification signal from a network node to a sending module in response to identification of the non-congestion-based packet loss, and verifying the non-congestion-based packet loss at the sending module independently of the receipt of loss notification signals. Among other things, this verification provides security against malicious attacks by making a determination of non-congestion processing that is independent from the signaling, which may originate from untrustworthy network elements. The scheme of *Ramakrishnan* does account for signaling that originates from an untrustworthy source, because the system of *Ramakrishnan* relies solely on SACK signaling to determine whether or not to invoke congestion processing.

The Applicant submits, therefore that *Ramakrishnan* does not teach every element of Claim 1, and therefore fails to anticipate Claim 1. Dependent Claims 2 and 17, which depend from Claim 1, also stand rejected under 35 U.S.C. §102(e) as being anticipated by *Ramakrishnan*. While the Applicant does not acquiesce with the particular rejections to these dependent claims, these rejections are moot in view of the remarks made in

connection with independent Claim 1. These dependent claims include all of the limitations of their respective base claim and any intervening claims, and recite additional features which further distinguish these claims from the cited references. Therefore, dependent Claims 2 and 17 are also in condition for allowance.

Claims 3, 13, 14, 18 and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Ramakrishnan* in view of “A Comparision of Mechanisms for Improving TCP Performance Wireless Links” by *Balakrishnan et al.* (hereinafter *Balakrishnan*). The Applicant respectfully traverses the rejection. To establish a prima facie case of obviousness based on a combination of references, three basic criteria must be met, as is set forth in M.P.E.P., §2143:

- 1) There must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;
- 2) There must be a reasonable expectation of success; and
- 3) The prior art references must teach or suggest all of the claim limitations.

All three criteria must be met to establish prima facie obviousness of a claim. For the rejections of Claims 3, 13, 14, 18, and 19, the Examiner relies on *Ramakrishnan* as teaching the substance of the claims from which Claims 3, 13, 14, 18, and 19 ultimately depend, namely, Claim 1. The Examiner does not rely on *Balakrishnan* as providing a remedy to the deficiencies of *Ramakrishnan* as it pertains to independent Claim 1, nor does *Balakrishnan* provide such a remedy. Thus, because neither *Ramakrishnan* nor *Balakrishnan* teach at least the recitations of Claim 1, a combination of *Ramakrishnan* and *Balakrishnan* fails to teach these recitations. Further, a combination of *Ramakrishnan* and *Balakrishnan* fails to suggest the invention set forth in Claim 1, as there is no reference to at least verifying non-congestion-based packet loss independently of the receipt of loss notification signals. While other requisites of establishing prima facie obviousness may also be absent, the Applicant respectfully submits that the cited combination of references at least fails to teach or suggest all of the claim limitations. For at least this reason, Claims 3, 13, 14, 18, and 19 are not rendered obvious by the

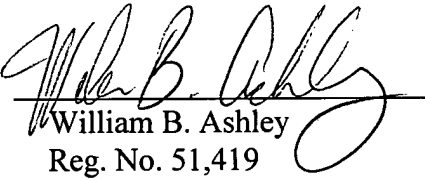
combination of *Ramakrishnan* and *Balakrishnan*, and withdrawal of the rejection is respectfully solicited.

Authorization is given to charge Deposit Account No. 50-3581 (NOKM.046PA) any necessary fees for this filing. If the Examiner believes it necessary or helpful, the undersigned agent of record invites the Examiner to contact him at 952.854.2700 to discuss any issues related to this case.

Respectfully submitted,

HOLLINGSWORTH & FUNK, LLC
8009 34th Avenue South, Suite 125
Minneapolis, MN 55425
952.854.2700

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By: 
William B. Ashley
Reg. No. 51,419